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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,394	06/25/2003	Frank Westendorf	7781.0084-00	4798

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EXAMINER

MITCHELL, JASON D

ART UNIT PAPER NUMBER

2193

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,394	Applicant(s) WESTENDORF ET AL.	
	Examiner Jason Mitchell	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to an application filed 6/25/2003.

This application claims priority to provisional applications 60/391727, 60/392337, 60/392516, 60/392709 and 60/392711 each filed on 6/25/02.

Claims 1-45 are pending in this application.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Methods and Systems for Providing Object Oriented Classes and Methods".

Drawings

Figure 3-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2193

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “software application 8” (see para. [019]). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-45 are rejected under 35 U.S.C. 102(b) as being anticipated by “The Java Virtual Machine Specification” by Lindholm et al. (Lindholm).

Regarding Claim 1, 16, 31: Lindholm discloses **defining one or more classes of objects, the classes having one or more methods for performing operations on the objects;**

"An interface is a reference type whose members are constants and abstract methods."

(see pg. 30, 2.13 Interfaces)

creating one or more objects of the one or more classes, each object having an identifier within its class;

"classes can implement [an interface] by providing implementations for its abstract methods." (see pg. 30, 2.13 Interfaces); "There are three kinds of reference types: ... the interface types (§2.13) ... An object is a dynamically created class instance ... The reference values ... are pointers to these objects" (see pg. 9, 2.4.5 Reference Types, Objects, and Reference Values)

creating a tool having at least one function for providing an executable solution to the one or more methods of the one or more classes, whereby the at least one function is assigned to one or more methods of the one or more classes; and

"A class may be declared to directly implement one or more interfaces, meaning that any instance of the class implements all the abstract methods specified by that interface." (see pg. 30, 2.13 Interfaces)

assigning the tool to one of the one or more objects of the one or more classes by using the identifier of the object.

"It is not sufficient that the class happens to implement all the abstract methods of the interface; the class ... must actually be declared to implement the interface, or else the

class is not considered to implement the interface.” (see pg. 30, 2.13 Interfaces); “Stack ..., objectref, parg1, [arg2 ...]” (see pg. 258, invokeinterface).

Regarding Claims 2, 17, and 32: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses assigning the tool to an object is performed based on a table (pg. 92, 4.4 Constant Pool) wherein the tool is associated with one or more identifiers (pg. 148, 5.3 Interface Method Resolution “A constant pool entry tagged as CONSTANT_InterfaceMethodref (§4.4.2) represents a call to an instance method declared by an interface.”).

Regarding Claims 3, 18, and 33: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses assigning the tool to an object is performed based on a table (pg. 92, 4.4 Constant Pool) wherein the tool is associated with one or more identifiers (g. 148, 5.3 Interface Method Resolution “A constant pool entry tagged as CONSTANT_InterfaceMethodref (§4.4.2) represents a call to an instance method declared by an interface.”) and wherein the tool is assigned to objects of only one class (see pg. 30, 2.13 Interfaces “A class may be declared to directly implement one ... interfaces”).

Regarding Claims 4, 19, and 34: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses the identifier is unique within its class (pg. 258, invokeinterface “The method table of the class of the type of objectref is determined.”). Note that objectref is a pointer to a memory location (pg. 9, 2.4.5 Reference Types, Objects, and Reference Values “An object is a dynamically created

class instance ... The reference values ... are pointers to these objects”) and thus is unique within the system and inherently anticipates a unique reference within the class.

Regarding Claim 5-8, 20-23, 35-38: The rejections of claim 1-4, 16-19, 31-34 are incorporated, respectively; further Lindholm discloses the at least one function comprises a reference to an executable code (pg. 84, ClassFile “ClassFile { ... method_info methods[method_count];”).

Regarding Claims 9-12, 24-27, and 39-42: The rejections of claims 1-4, 16-19, and 31-34 are incorporated, respectively; further Lindholm discloses the at least one function comprises a reference to a data array, in which information relating to attributes for the at least one function are stored (pg. 84, ClassFile “ClassFile { ... field_info fields [fields_count];”).

Regarding Claims 13-15, 28-30, and 43-45: The rejections of claims 1-3, 16-18, and 31-33 are incorporated, respectively; further Lindholm discloses the tool comprises a reference to a data array in which information relating to attributes for at least two functions of the tool are stored (pg. 84, ClassFile “ClassFile { ... field_info fields [fields_count];”). Note that the ‘fields’ array is available to all methods of the class and thus anticipates at least two functions (i.e. ‘method_count’>=2).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jason Mitchell
9/20/06



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